



JC04R-3-1 PCT/PTO 27 JUN 2001

pre B #3

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

09 868 316

In re the Application of

Naomasa SHIRAISHI

Application No.: U. S. National Stage of  
PCT/JP99/06962

Filed: June 18, 2001

Docket No.: 109820

For: PRODUCING METHOD AND APPARATUS OF PHOTOMASK

SUPPLEMENTAL PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office  
Washington, D.C. 20231

Sir:

As a supplement to the amendment filed on June 18, 2001, please further amend the  
above-identified application as follows:

IN THE SPECIFICATION:

Page 23, lines 6-17, delete current paragraph and insert therefor:

Next, when the working reticle WR is illuminated by the illumination optical system  
31 and the reduced image of this pattern is transferred onto the wafer W through the  
projection optical system 33 as shown in Fig. 4, deformation of some extent of the projected  
image by the optical proximity effect, and by extension deformation of a pattern to be formed  
are generated. Especially when a pattern to be transferred is a fine dense pattern, there is an  
adverse possibility that the deformation amount exceeds a predetermined tolerance.

Thereupon, in this example, the influence of the optical proximity effect is corrected as will  
be explained with reference to Figs. 2A, 2B1, 2B2, 2C1 and 2C2.